

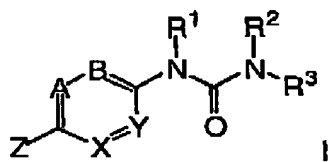
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 Filed: December 18, 2001

This listing of claims will replace all prior versions, and listings, of claims in the application (note that amendments are highlighted in **bold**, text deletions are **struck through** and text additions are underlined):

Listing of Claims:

1. (currently amended) A compound of Formula I:

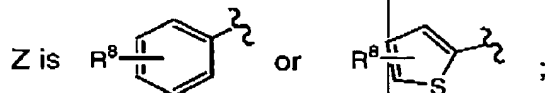


or a pharmaceutically acceptable salt of said compound, or where applicable, a geometric or optical isomer or racemic mixture thereof,

wherein

~~=A-B= is =N-C(R⁵)- and -X=Y- is -N=C(R⁷)-, or~~
~~=A-B= is =C(R⁴)-N= and -X=Y- is -C(R⁶)=N-,~~

=A-B= is =C(R⁴)-N= and -X=Y- is -N=C(R⁶)-,
or =A-B= is -N-C(R⁶)-, and -X=Y- is -C(R⁴)=N-



R¹ is H or -(C₁-C₆)alkyl;

R² is H, -(C₁-C₆)alkyl, -(C₃-C₇)cycloalkyl or -(C₁-C₆)alkyl(C₃-C₇)cycloalkyl;

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C₇)cycloalkyl, -(C₁-C₆)alkyl(C₃-C₇)cycloalkyl, NR¹⁰R¹¹, NR¹³R¹⁴, -O(C₁-C₆)alkyl, -O(C₃-C₇)cycloalkyl, -O(C₁-C₆)alkyl(C₃-C₇)cycloalkyl and -CONR¹³R¹⁴;

R⁹ is -SO₂(C₁-C₆)alkyl, -SO₂(C₃-C₇)cycloalkyl, -SO₂(C₁-C₆)alkyl(C₃-C₇)cycloalkyl, -SO₂(C₁-C₆)polyhaloalkyl, -SO₂[hydroxy(C₂-C₆)alkyl], -SO₂[amino(C₂-C₆)alkyl], -SO₂[alkoxy(C₂-C₆)alkyl], -SO₂[alkylamino(C₂-C₆)alkyl], -SO₂[dialkylamino(C₂-C₆)alkyl], -SO₂(aryl), -SO₂(heteroaryl), -SO₂[aryl(C₁-C₆)alkyl], -SO₂NR¹³R¹⁴, -CO(C₁-C₆)alkyl, -CO(C₃-C₇)cycloalkyl, -CO(C₁-C₆)alkyl(C₃-C₇)cycloalkyl, CO(C₁-C₆)polyhaloalkyl, -C(O)aryl, -C(O)heteroaryl, -CONR¹³R¹⁴, -C(S)NR¹³R¹⁴, aryl, heteroaryl, -(CH₂)CONR¹³R¹⁴, -C(=NCN)alkylthio, -C(=NCN)NR¹³R¹⁴, -(C₁-C₆)alkyl, -(C₃-C₇)cycloalkyl, -(C₁-C₆)alkyl(C₃-C₇)cycloalkyl, -(C₁-C₆)alkylaryl, -(C₁-C₆)alkylheteroaryl or -COOR¹²;

R¹⁰ is H or alkyl;

R¹¹ is H, -(C₁-C₆)alkyl, -(C₃-C₇)cycloalkyl, -(C₁-C₆)alkyl(C₃-C₇)cycloalkyl, aryl, heteroaryl, -SO₂(C₁-C₆)alkyl, -SO₂(C₃-C₇)cycloalkyl, -SO₂(C₁-C₆)alkyl(C₃-C₇)cycloalkyl, -SO₂(C₁-C₆)polyhaloalkyl, -SO₂(aryl), -SO₂(heteroaryl), -CO(C₁-C₆)alkyl, -CO(C₃-C₇)cycloalkyl, -CO(C₁-C₆)alkyl(C₃-C₇)cycloalkyl, -C(O)aryl, -C(O)heteroaryl, -CONR¹³R¹⁴ or -COOR¹²;

R¹² is (C₁-C₆)alkyl, (C₃-C₇)cycloalkyl, (C₁-C₆)alkyl(C₃-C₇)cycloalkyl, -(C₁-C₆)alkylaryl, -(C₁-C₆)alkylheteroaryl, aryl or heteroaryl;

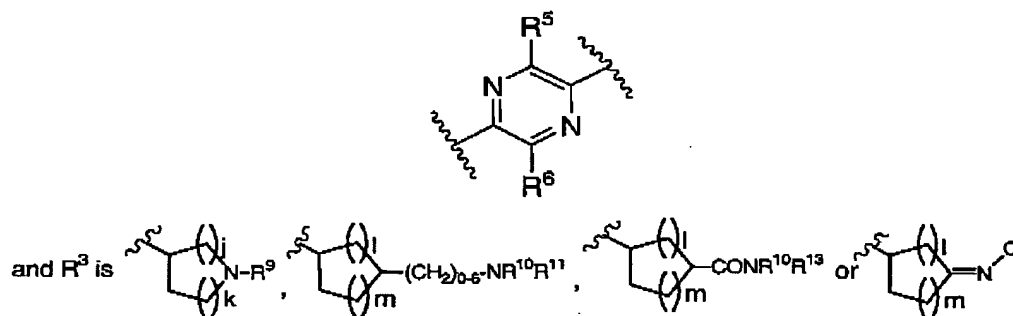
R¹³ and R¹⁴ may be the same or different and are independently H, -(C₁-C₆)alkyl, -(C₃-C₇)cycloalkyl, -(C₁-C₆)alkyl(C₃-C₇)cycloalkyl, -(C₁-C₆)alkylaryl, aryl or heteroaryl; and,

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R^{15} is one or two substituents, which may be the same or different, and are independently H, $-(C_1-C_6)\text{alkyl}$, $-(C_3-C_7)\text{cycloalkyl}$, $-(C_1-C_6)\text{alkyl}(C_3-C_7)\text{cycloalkyl}$, aryl, heteroaryl, $-\text{CN}$, $-\text{CONR}^{13}\text{R}^{14}$, $-\text{COOR}^{13}$, $-\text{OH}$, $-\text{O}(C_1-C_6)\text{alkyl}$, $-\text{O}(C_3-C_7)\text{cycloalkyl}$, $-\text{O}(C_1-C_6)\text{alkyl}(C_3-C_7)\text{cycloalkyl}$, $-\text{NR}^{10}\text{R}^{11}$, $-\text{NR}^{13}\text{R}^{14}$, or a $-(C_1-C_6)\text{alkyl}$ group substituted by an aryl, heteroaryl, hydroxy, alkoxy, $-\text{NR}^{10}\text{R}^{11}$, $-\text{NR}^{13}\text{R}^{14}$, $-\text{CONR}^{13}\text{R}^{14}$, or $-\text{COOR}^{13}$ group, provided that a chemically stable compound results from substitution by R^{15} .

2. (previously presented) A compound as defined in Claim 1 wherein the heterocyclic group attached to Z is



3. (previously presented) A compound as defined in Claim 2 wherein
 R^1 is hydrogen,
 R^2 is hydrogen or $(C_1-C_6)\text{alkyl}$,
 R^5 and R^6 are hydrogen or halogen,
 R^8 is 1 to 3 substituents, which may be the same or different, and are independently selected from the group consisting of H, halogen, $-\text{O}(C_1-C_6)\text{alkyl}$, $-\text{OH}$, polyhaloalkyl and polyhaloalkoxy,

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R^9 is $-\text{SO}_2(\text{C}_1-\text{C}_6)\text{alkyl}$, $-\text{SO}_2(\text{C}_3-\text{C}_7)\text{cycloalkyl}$, $-\text{SO}_2(\text{C}_1-\text{C}_6)\text{alkyl}(\text{C}_3-\text{C}_7)\text{cycloalkyl}$, $-\text{SO}_2\text{aryl}$, $-\text{SO}_2\text{heteroaryl}$, $-\text{SO}_2\text{NR}^{13}\text{R}^{14}$, $-\text{CO}(\text{C}_1-\text{C}_6)\text{alkyl}$, $-\text{CO}(\text{C}_3-\text{C}_7)\text{cycloalkyl}$, $-\text{CO}(\text{C}_1-\text{C}_6)\text{alkyl}(\text{C}_3-\text{C}_7)\text{cycloalkyl}$, $-\text{C}(\text{O})\text{aryl}$, $-\text{C}(\text{O})\text{heteroaryl}$, aryl, heteroaryl,

R^{10} is H or $-(\text{C}_1-\text{C}_6)\text{alkyl}$,

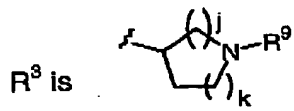
R^{11} is $-\text{SO}_2(\text{C}_1-\text{C}_6)\text{alkyl}$, Q is $-\text{OR}^{13}$ or $-\text{NR}^{13}\text{R}^{14}$;

R^{13} and R^{14} may be the same or different, and are independently H or $-(\text{C}_1-\text{C}_6)\text{alkyl}$;

the sum of j and k is 2 or 3; and,

the sum of l and m is 2 or 3.

4. (original) A compound as defined in Claim 3 wherein



R^9 is $-\text{SO}_2(\text{C}_1-\text{C}_6)\text{alkyl}$, $-\text{SO}_2(\text{C}_3-\text{C}_7)\text{cycloalkyl}$, $-\text{SO}_2\text{aryl}$, $-\text{SO}_2\text{heteroaryl}$, $-\text{CO}(\text{C}_1-\text{C}_6)\text{alkyl}$, $-\text{CO}(\text{C}_3-\text{C}_7)\text{cycloalkyl}$, $-\text{CO}(\text{C}_1-\text{C}_6)\text{alkyl}(\text{C}_3-\text{C}_7)\text{cycloalkyl}$, $-\text{C}(\text{O})\text{aryl}$, $-\text{C}(\text{O})\text{heteroaryl}$, aryl, or heteroaryl, and

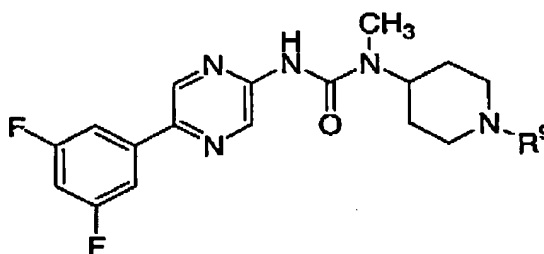
the sum of j and k is 2 or 3.

Claims 5-11 (canceled)

12. (previously presented) The compound as defined in Claim 1 of the formula

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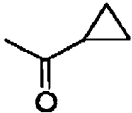
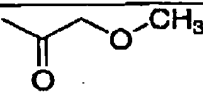
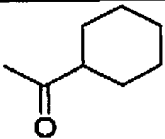
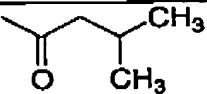
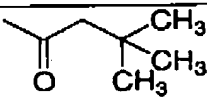
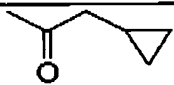
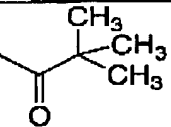
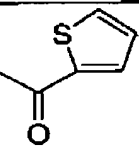
or a pharmaceutically acceptable salt of said compound, or where applicable, a geometric or optical isomer or racemic mixture thereof,

wherein R⁹ is as shown in the table below:

	R ⁹
0	
0A	
0B	
0C	
0D	

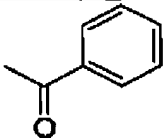
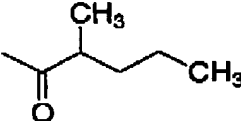
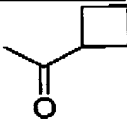
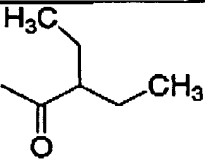
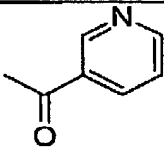
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	R ⁹
OE	
OF	
OG	
OH	
OI	
OJ	
OK	
OL	

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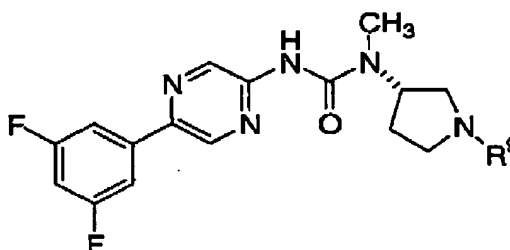
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	R ⁹
OM	
ON	
OO	
OP	
OQ	
OW	-SO ₂ CH ₃

13. (previously presented) The compound as defined in Claim 1 of the formula

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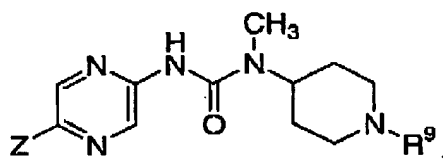
or a pharmaceutically acceptable salt of said compound, or where applicable,
a geometric or optical isomer or racemic mixture thereof,
wherein R⁹ is as shown in the table below:

	R ⁹
OS	-SO ₂ CH ₃
OT	
OU	
OV	

14. (previously presented) The compound as defined in Claim 1 of the formula

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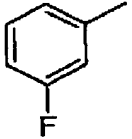
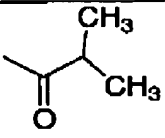
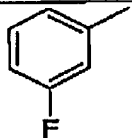
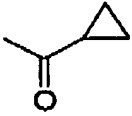
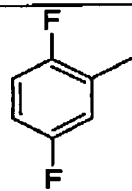
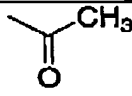
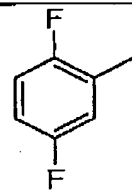

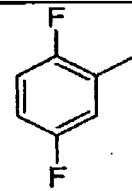
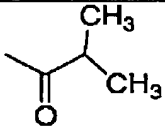
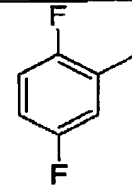
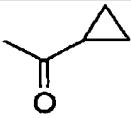
or a pharmaceutically acceptable salt of said compound, or where applicable, a geometric or optical isomer or racemic mixture thereof,

wherein Z and R⁹ are as shown in the table below:

	Z	R ⁹
0X		-SO ₂ CH ₃
0Y		
0Z		

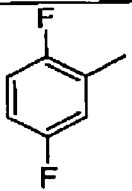
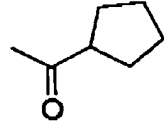
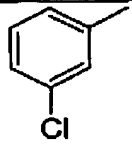
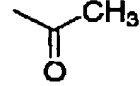
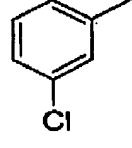
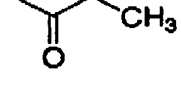
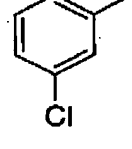
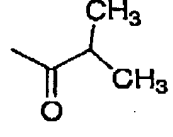
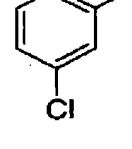
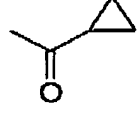
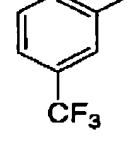
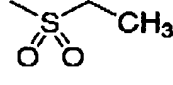
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	Z	R ⁹
0AA		
0BB		
0CC		
0DD		
0EE		
0FF		

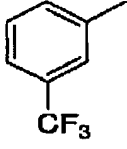
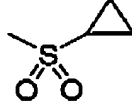
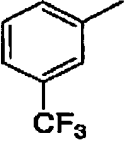
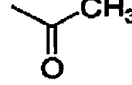
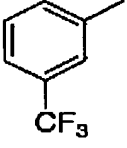
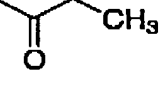
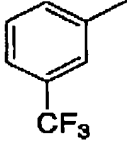
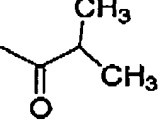
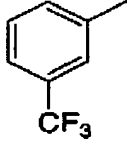
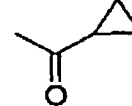
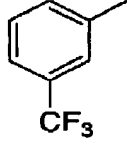
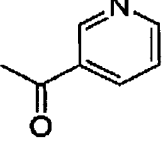
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	Z	R ⁹
OGG		
OHH		
OII		
OJJ		
OKK		
OLL		

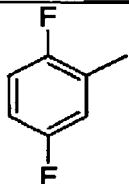
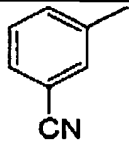
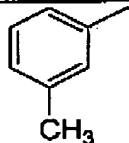
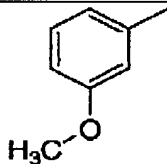
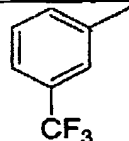
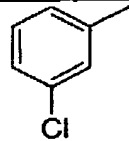
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	Z	R ⁹
OMM		
ONN		
OOO		
OPP		
OQQ		
ORR		

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	Z	R ⁹
1		-SO ₂ CH ₃
1A		-SO ₂ CH ₃
1B		-SO ₂ CH ₃
1C		-SO ₂ CH ₃
1D		-SO ₂ CH ₃
1E		-SO ₂ CH ₃

Claims 15-20 (canceled)

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21. (original) A pharmaceutical composition which comprises an effective amount of a compound as defined in Claim 1 and a pharmaceutically acceptable carrier therefor.

22. (previously presented) A method of treating eating disorders, obesity and disorders related to obesity comprising administering to a mammal in need of such treatment a therapeutically effective amount of a compound of Claim 1 or a pharmaceutically acceptable salt of said compound.

23. (original) The method of Claim 22 wherein said eating disorder is hyperphagia.

Claim 24 (cancelled)

25. (previously presented) A method of treating disorders associated with obesity comprising administering to a mammal in need of such treatment a therapeutically effective amount of a compound of Claim 1 or a pharmaceutically acceptable salt of said compound.

26. (original) The method of Claim 25 wherein said disorders associated with obesity are type II diabetes, insulin resistance, hyperlipidemia and hypertension.

27. (previously presented) A pharmaceutical composition which comprises a therapeutically effective amount of a composition comprising

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a first compound, said first compound being a compound of claim 1, or a pharmaceutically acceptable salt of said compound;

a second compound, said second compound being a β_3 agonist, a thryomimetic agent, an eating behavior modifying agent or an NPY antagonist; and

a pharmaceutically acceptable carrier therefor.

28. (previously presented) A method of treating an eating disorder which comprises administering to a mammal in need of such treatment

an amount of a first compound, said first compound being a compound of claim 1, or a pharmaceutically acceptable salt of said compound;

a second compound, said second compound being a β_3 agonist, a thryomimetic agent, an eating behavior modifying agent or an NPY antagonist;

wherein the amounts of the first and second compounds result in a therapeutic effect.

29. (previously presented) A pharmaceutical composition which comprises a therapeutically effective amount of a composition comprising

a first compound, said first compound being a compound of claim 1, or a pharmaceutically acceptable salt of said compound;

a second compound, said second compound being an aldose reductase inhibitor, a glycogen phosphorylase inhibitor, a sorbitol dehydrogenase inhibitor, insulin, metformin, acarbose, a thiazolidinedione such as troglitazone or rezulin; a

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glitazone such as rosiglitazone or pioglitazone; a sulfonylurea, glipazide, glyburide, or chlorpropamide; and

a pharmaceutically acceptable carrier therefor.

Claim 30 (canceled)

31. (original) A process for making a pharmaceutical composition comprising combining a compound of Claim 1 and a pharmaceutically acceptable carrier.